## Cooperative Ecosystem Studies Units



Thomas E. Fish, National Coordinator cesu.org

- What is the Cooperative Ecosystem Studies Units Network?
- History
- Program Description
- Example projects
- Future of the CESU Network



## What is the CESU Network?

A nationwide consortium of federal agencies, universities, conservation organizations, and other partners working together to support agency missions and informed public trust resource stewardship



## What is the CESU Network?

- Anthropology to Zoology
- coordinated, collaborative, applied
- natural and cultural resource issues
- multiple scales
- ecosystem context



## What is the CESU Network?

- 13 federal agencies
- 226 universities (54 minority serving institutions)
  - 66 state, tribal, and non-governmental

305 total partners (as of December 2011)

Since 1999, ~7,500 projects over \$600 million (estimated figures)



**Bureau of Land Management** 



U.S. Fish and Wildlife Service



**U.S.** Geological Survey



**National Park Service** 



**Bureau of Reclamation** 



**BOEM Bureau of Ocean Energy Management** 



**ONECS** Natural Resources Conservation Service



**U.S. Forest Service** 



**Agricultural Research Service** 



National Oceanic and Atmospheric Administration



National Aeronautics and Space Administration



**U.S. Army Corps of Engineers** 



**Department of Defense (Installations & Environment)** 





## CESU Network Objectives

- to provide timely scientific research, technical assistance, and education services to develop usable knowledge supporting public trust resource stewardship aligned with agency and partner missions;
- to create and maintain effective collaborative partnerships among federal and state agencies, universities, and other nonfederal partners to share resources and expertise;
- to promote/maintain high standards for scientific research, technical assistance, and educational activities and associated project outputs;
- to encourage professional development of federal scientists, technical staff,
   and managers through substantial involvement in projects;
- to help prepare future conservation professionals through direct involvement with real-life conservation issues and problem solving.

## **A** 1999

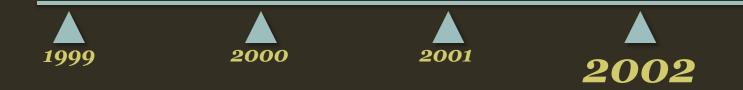
- Rocky Mountains University of Montana
- Colorado Plateau Northern Arizona University
- North Atlantic Coast University of Rhode Island
- Southern Appalachian Mountains University of Tennessee



- Desert Southwest University of Arizona
- Pacific Northwest University of Washington
- South Florida-Caribbean University of Miami
- Great Plains University of Nebraska, Lincoln



- Chesapeake Watershed University of Maryland
- Great Basin University of Nevada, Reno



- Great Lakes Northern Forest University of Minnesota
- Gulf Coast Texas A&M University



- North & West Alaska University of Alaska
- Piedmont South Atlantic Coast University of Georgia
- Upper and Middle Mississippi Valley (now Great Rivers) – University of Missouri
- Californian University of California, Berkeley
- Hawaii Pacific Islands University of Hawaii



## **CESU** Cooperative Ecosystem Studies Units Network







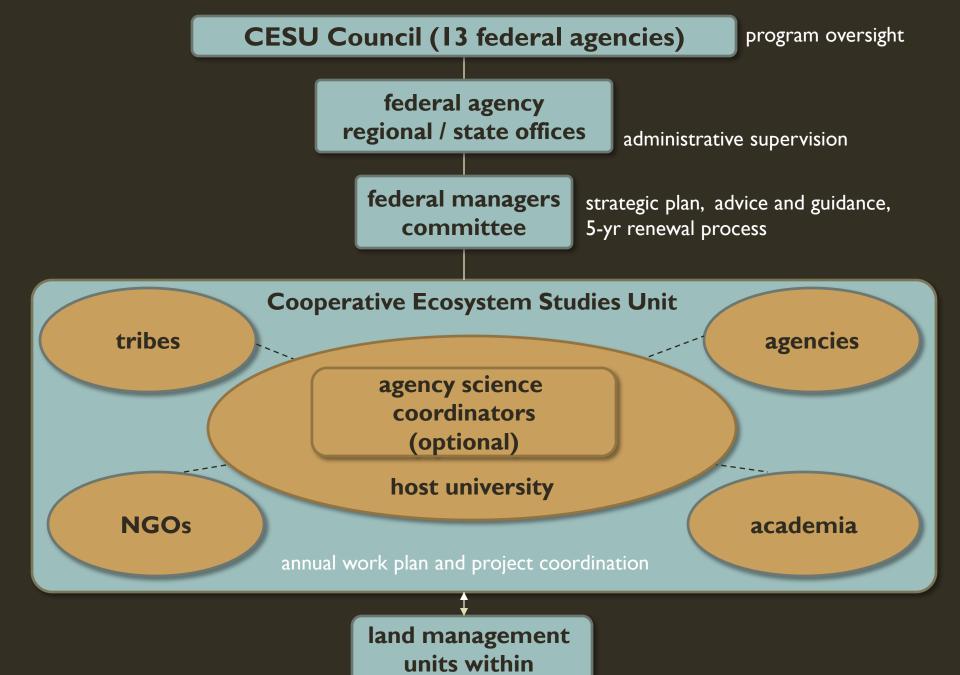
## Program Description

- established renewable Cooperative/Joint Venture Agreements with 5 year duration
- agreements renewed based on mutual consent, self-assessment, federal agency assessment, and independent external review
- many operational model variations



## Program Description

- host university with administrative support staff
- multiple federal agencies
- partner institutions (at least one minority institution)
- federal managers committee
- role and mission statement
- strategic plan and annual work plans
- website
- annual partners meeting



geographic area



## National Office Key Initiatives

- I0-year Program Evaluation and Project Inventory
- CESU Network Administrative History
- Strategic Plan Revision
- Administrative Handbook
- Collaborative Science Program Summit
- 2012 CESU Network National Meeting (June)



## 2010 National Meeting

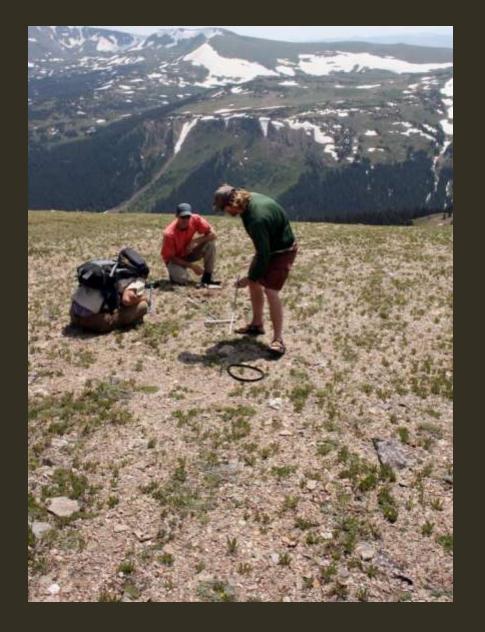


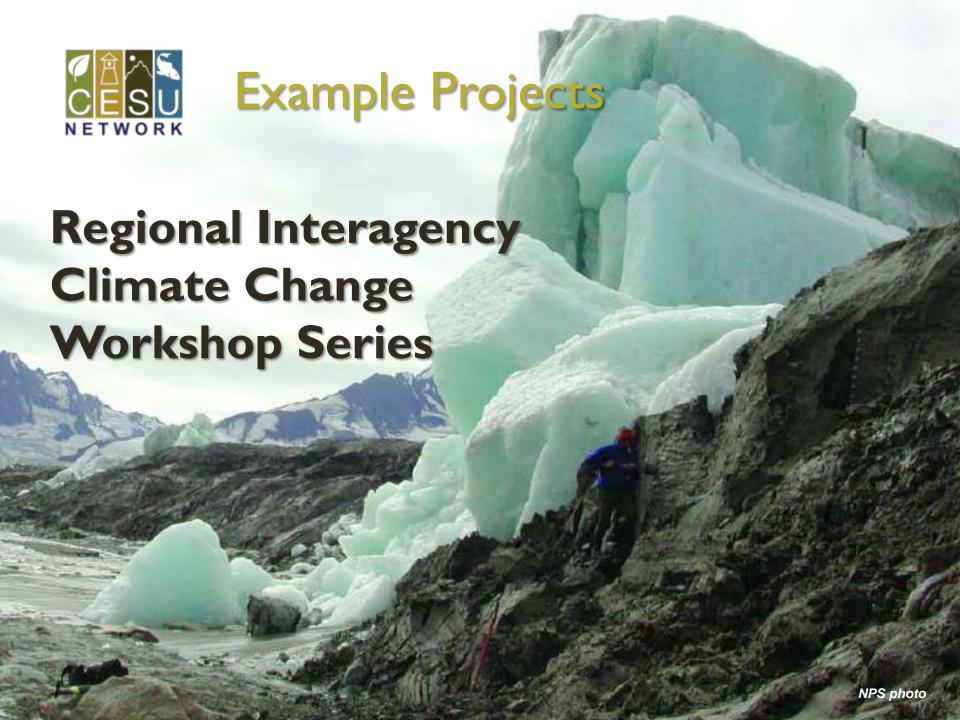
Cooperative Ecosystem Studies Units Network



#### Projects can be

- Research,
- Education, and/or
- Technical Assistance









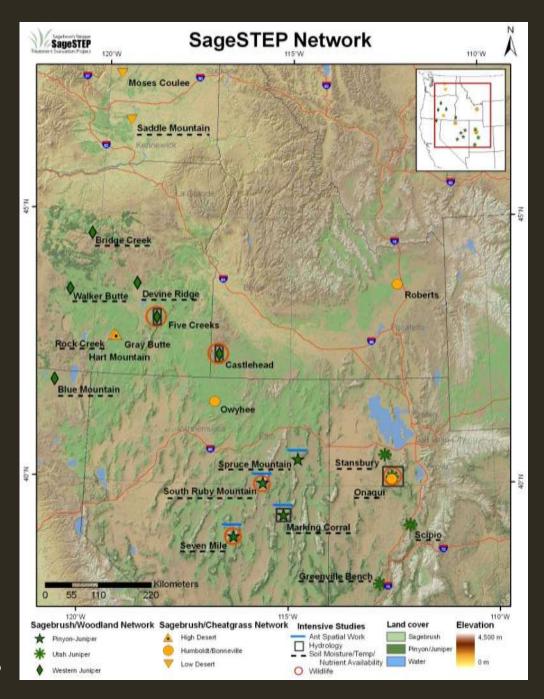


A Climate
Change
Education
Module
on Pacific
Island
Coral Reefs





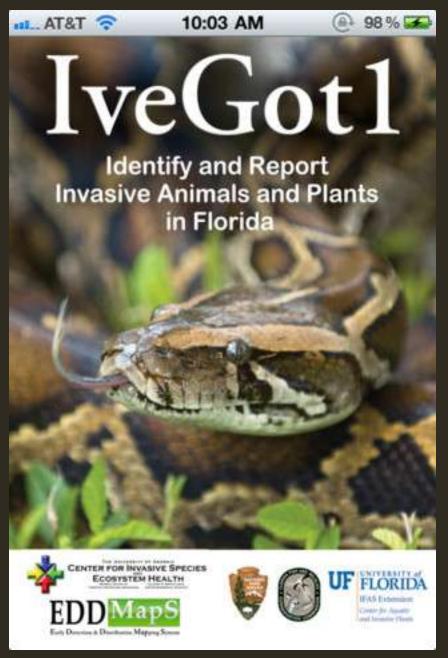
Sagebrush Steppe
Treatment
Evaluation Project
(Sage STEP)







Mobile App to Identify and Track Invasive Exotics in Florida



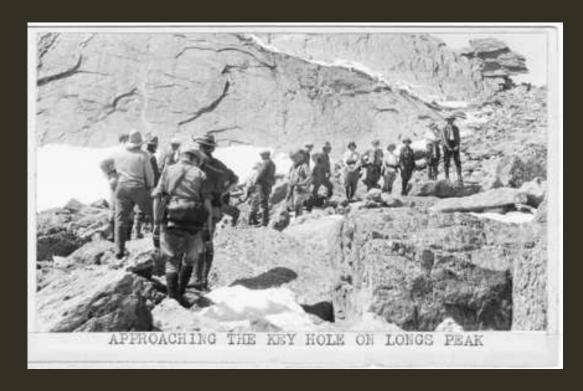






Developing, Testing, and Implementing the Recovery Credit System





People and Nature on the Mountaintop

A Resource and Impact Study of Longs Peak in Colorado





Humpback Chub Reintroductions and PIT-tag Technology



Shifting Risk Perceptions of Wildlife Disease: A Study of Avian Outbreak







Natural and Cultural Crossroads: An Environmental History of Pecos National Historical Park



Documenting Fire History in National Parks, Monuments and Historic Sites of the Great Plains

George Catlin painting, Smithsonian American Art Museum



Joshua Tree Vegetation Modeling: Predicting Shifts in the Face of Climate Change



Student Internships: Warriors Project







encroachment around military lands, encourage compatible resource-use decisions, and improve coordination among regions, states, communities, and military services.





#### Future of the CESU Network

- adding new federal and nonfederal partners
- expanding participation and scope of the CESU Network with existing network partners
  - sustainability science
  - green engineering and technology
  - renewable/sustainable energy
  - green workforce development
  - international collaboration
- elevating opportunities for capacity building for tomorrow's environmental professionals
  - national office fellowship program
  - system-wide internship program

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